

ABSTRACT OF THE DISCLOSURE

The present invention provides combined property, dual-action compositions for application to a material, such as Gypsum Wall Board, ceiling tiles, joint compounds,
5 concrete and other interior building materials, prior to an exposure of the material to fire, or prior to, during or after exposure of the material to conditions favorable to the growth of microbes. When compositions within the present invention are properly applied to a material prior to the material being exposed to fire, or prior to, during or after the material being exposed to conditions favorable to the growth of microbes, these compositions
10 have the effect of reducing the amount of burning that occurs to the material, and/or reducing the amount or density of smoke and associated toxic gases produced by the material, when the material is exposed to fire. These compositions also have the effect of inhibiting or reducing the growth, build-up or deposit of microbes on the material when the material is exposed to conditions favorable to the growth of microbes.

15 The present invention also provides methods for reducing the burning of, and/or the amount or density of smoke and associated toxic gases produced by, a material that is exposed to fire, and for inhibiting or reducing the growth, build-up or deposit of microbes on a material that is exposed to conditions favorable to the growth of microbes, comprising applying a composition of the present invention to the material at least one
20 time prior to the material being exposed to the fire, or prior to, during or after the material being exposed to conditions favorable to the growth of microbes, at a rate of about 1 gallon per from about 100 to about 1,000 square feet of the material.